

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
REGISTRATION FORM**

10-26-04

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "X" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name **Chicago & North Western Railway Power House**

other names/site number

2. Location

street & number **211 North Clinton Street**

____ Not for publication

city or town **Chicago**

____ vicinity

state **Illinois**

code **IL**

county **Cook**

code **031**

zip code **60606**

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this nomination _____ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets _____ does not meet the National Register Criteria. I recommend that this property be considered significant _____ nationally _____ statewide locally. (_____ See continuation sheet for additional comments.)

Wilfrid C. Wheeler *15HP0*
Signature of certifying official

10-19-04
Date

Illinois Historic Preservation Agency

State or Federal agency and bureau

In my opinion, the property _____ meets _____ does not meet the National Register criteria. (_____ See continuation sheet for additional comments.)

Signature of commenting or other official

Date

State or Federal agency and bureau

American Indian Tribe

Chicago & North Western Railway Power House
Name of Property

Cook County, Illinois
County and State

4. National Park Service Certification

I. hereby certify that this property is:	Signature of the Keeper	Date of Action
<input type="checkbox"/> entered in the National Register	_____	_____
<input type="checkbox"/> See continuation sheet.		
<input type="checkbox"/> determined eligible for the National Register	_____	_____
<input type="checkbox"/> See continuation sheet.		
<input type="checkbox"/> determined not eligible for the National Register	_____	_____
<input type="checkbox"/> removed from the National Register	_____	_____
<input type="checkbox"/> other (explain):	_____	_____

5. Classification

Ownership of Property
(Check as many boxes as apply)

- private
 public-local
 public-State
 public-Federal

Category of Property
(Check only one box)

- building(s)
 district
 site
 structure
 object

Number of Resources within Property
(Do not include previously listed resources in the count)

Contributing	Noncontributing
<u> 1 </u>	<u> 0 </u> buildings
<u> 0 </u>	<u> 0 </u> sites
<u> 0 </u>	<u> 0 </u> structures
<u> 0 </u>	<u> 0 </u> objects
<u> 1 </u>	<u> 0 </u> Total

Number of contributing resources previously listed in the National Register N/A

Name of related multiple property listing (Enter "N/A" if property is not part of a multiple property listing.)

N/A

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6. Function or Use

Historic Functions (Enter categories from instructions)

INDUSTRY/ Energy Facility

Current Functions (Enter categories from instructions)

WORK IN PROGRESS

7. Description

Architectural Classification
(Enter categories from instructions)

Beaux Arts
Italian Renaissance

Materials (Enter categories from instructions)

Foundation Concrete

Roof Asphalt

Walls Brick

Other Terra Cotta

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

See Continuation Sheets

8. Statement of Significance

Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations (Mark "X" in all the boxes that apply.)

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or a grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance (Enter categories from instructions)

Architecture

Transportation

Period of Significance **1909-1954**

Significant Dates **1909, 1911**

Significant Person (Complete if Criterion B is marked above) **N/A**

Cultural Affiliation **N/A**

Architect/Builder **Frost and Granger, architects**

Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.) **See Continuation Sheet**

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9. Major Bibliographical References

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS)

- preliminary determination of individual listing (36 CFR 67) has been requested.
 previously listed in the National Register
 previously determined eligible by the National Register
 designated a National Historic Landmark
 recorded by Historic American Buildings Survey # _____
 recorded by Historic American Engineering Record # _____

Primary Location of Additional Data

- State Historic Preservation Office
 Other State agency
 Federal agency
 Local government
 University
 Other

Name of repository **Archives, Chicago & North Western Railway**

10. Geographical Data

Acreage of Property **less than one acre**

UTM References (Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing	Zone	Easting	Northing
1	16	446800	4637371	3	_____	_____
2	_____	_____	_____	4	_____	_____

____ See continuation sheet.

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

See Continuation Sheet

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

See Continuation Sheet

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Name of Property

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County and State

11. Form Prepared By

name/title **Susao S. Benjamin, Principal**

organization **Benjamin Historic Certifications, LLC**

date **May 15, 2004**

street & number **711 Marion Avenue**

telephone **847-432-1865**

city or town **Highland Park**

state **Illinois**

zip code **60035**

Additional Documentation

Submit the following items with the completed form:
Continuation Sheets

Maps
A USGS map (7.5 or 15 minute series) indicating the property's location.
A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs
Representative black and white photographs of the property.

Additional items (Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of the SHPO or FPO.)

name **J. Michael Drew**

street & number **656 Randolph Street**

telephone **312-261-5775**

city or town **Chicago**

state **Illinois**

zip code **60661**

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

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7. PHYSICAL DESCRIPTION

SUMMARY

The Chicago & North Western Railway Power House, located at 211 North Clinton Street in Chicago, is a Beaux Arts style structure with Italian Renaissance Revival influences. It was designed by the architectural firm of Frost & Granger in 1909 and completed in 1911. The walls are cream-color brick resting on a stone base. Trim is of terra cotta. The building rests on a concrete foundation. Although the structure is irregularly-shaped, it is generally trapezoidal, with its entrance located on the building's longest facade, along Clinton Street. The building, which stands 54' tall from the sidewalk on the Clinton Street side, extends 234' along Clinton Street, 215' along the Chicago & North Western Railway tracks, 40' along Lake Street on the south and 60' along the diagonally oriented Milwaukee Avenue, that runs northwest-southeast. At the northwest corner is a 227'-tall brick stack. On the interior, the building has a small central lobby flanked by spaces that extend floor to ceiling. To the north is the space that served as the boiler room; to the south was the engine room. Walls in the engine room are partially faced in Grueby tile, and tall arched windows that light the space have cream-colored terra cotta casings. Although the machinery has been removed from the building and the cooling tower and motor house projection have been taken down, the structure has excellent integrity, with original fenestration and decorative trim.

CONTEXT

The Chicago & North Western Railway Station and its adjacent Power House were built just west of the Chicago River, which forms the western edge of Chicago's downtown business district. The earliest development in this part of Chicago, known as the Near West Side community area, took place in the 1840s, when lumber yards, foundries and flour mills were located along the south branch of the river. In November, 1848, a locomotive, "The Pioneer", made a trip from Chicago to the Des Plaines River and back. It was run by the Galena and Chicago Union Railroad, which through consolidation, later became the Chicago and North Western Railway. Chicago's population grew rapidly during the 1850s and 1860s, and early settlers, many of whom were immigrants arriving by rail, clustered in small frame cottages near

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the Near West Side factories. Finer residences--both row houses and mansions--were built further west along Washington and Jackson Boulevards and on Ashland Avenue. This trend continued after the Chicago Fire of 1871. During the 1880s, the eastern area of the Near West Side developed into a densely populated working class neighborhood settled by immigrants. Hull House, the city's first settlement house, established in 1889 by Jane Adams, was located just south and west of where the station was to be built. Large medical facilities began to develop nearby: these included Cook County Hospital, which was built in 1913.¹ When the railroad station and power house opened in 1911-12, the surrounding neighborhood consisted of 1-6 story masonry commercial buildings, which contained restaurants, hardware stores and other kinds of shops on the ground floor. Contemporary photos published in the *Chicago Daily News* show streets busy with horse-drawn wagon, carriage and trolley traffic.² Today, with the historic terminal having been demolished, the Beaux Arts Power House remains, in a neighborhood of factory and warehouse buildings that have been converted into condominiums and modern high rises, including a post-modern steel and glass skyscraper that was designed by Helmut Jahn that serves as Metra's railroad station for commuter traffic.³

EXTERIOR

Because the Chicago & North Western Railway Power House was designed to be a functional building, its overall shape was designed to accommodate its use as well as its restricted location, with streets or railroad tracks on each side of the building. The 234' Clinton

¹Chicago Historic Resources Survey: *An Inventory of Architecturally and Historically Significant Structures*. Chicago: Prepared by the Commission on Chicago Landmarks and the Chicago Department of Planning and Development, 1996. pp. III-207-208.

²There are many construction photographs of the Chicago and North Western Railway Station that were published in the *Chicago Daily News*. The negatives are located in the collection of the Chicago Historical Society (DN-0055250, Chicago Daily News negatives collection) and are accessible on the Internet.

³ Joe Pierson, archivist for the Chicago and North Western Historical Society, has pointed out that Metra trains use the current station and run on Union Pacific Rail. E-mail dated May 26, 2004.

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Street facade juts in 1' at the intersection of Clinton Street and Milwaukee Avenue. It then extends another 15', turns at an obtuse angle for 8' and again, at an obtuse angle for 15', along Milwaukee Avenue. It juts out 1' and extends 38'2-1/2" along Milwaukee Avenue. The wall then turns at an obtuse angle and extends 114' along the tracks. At that point there is an 11' opening to accommodate tracks for coal cars to enter north into the building and dump coal into hoppers to fuel the boilers located in the north end of the building. The east wall of the engine room extends from 5' past the opening 110' to the south wall of the building. This wall is 41' long. All of the exterior walls are sheathed in cream-color brick, although there are metal I-beams imbedded in the east wall of the engine room at the south end of the building. There are also steel I-beams along the east and west walls of the passageway for the railroad tracks that were used to transport the coal cars. There are arched window openings on each side of the building except on the side along the tracks. There are three shorter blind arched openings on the east engine room wall, at the south end of the building. Where the wall turns, at the intersection of Clinton Street and Milwaukee Avenue, it encloses the brick 227'-tall stack. This brick structure is 21' in diameter at the base, tapering, then flaring at the top to 14'.

The brick facades of the building are designed so that every sixth row of bricks, which are laid in stretcher courses, is recessed to form banding around the building. Terra cotta is used for a molded brick cornice, for the coping that tops the brick parapet wall 5'3" over the cornice, for 4' x 5' rectangular ornamental emblems framing the railway's monogram "C & NW RW", for a 2' molded band that surrounds the building, 3' under the cornice, and for large 3-part 6'-high keystones at the center of the tall arched window openings and the arched opening over the front entrance. There are 3'-high, 14' long rectangular brick panels located above each arched opening and each bay of the north wall, where the coal was loaded, on the east side of the building. Each rectangular panel contains a narrow recessed rectangular area surrounding a projecting brick panel comprised of brick headers. The parapet wall and coping have shallow brick pilasters topped by the terra cotta coping. The building rests on a 7'-high granite base. This base terminates in an 8'-high stone wall that is 31' long on Clinton Street and 31' long on Milwaukee Avenue, meeting each other in an acute angle.

The building was originally designed with two 30' x 20' x 31'-high cooling towers, located on either side of a 16'-high motor house. The south tower and motor house were

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removed in 1942. The north tower was never built.

The Clinton Street elevation, which is 234' long and extends from Milwaukee Avenue to Lake Street, is nine bays wide, each containing a tall historic opening. There are eight symmetrically placed windows, surrounding a door opening topped by a large window. Each of the eight identical window openings is 14'-wide, 27'-high and topped by a semi-circular arch. These openings contain steel windows with multiple small rectangular panes, divided into sections containing four panes separated from one another by slightly wider muntins. Sills are stone. Each tall window opening is recessed approximately 1' behind the plane of the wall. The wall pattern turns at a 90-degree inward, ending in a row of bricks that extends around the entire inside of the window opening. At a point 17' from the sill line there is a horizontal molded metal beam extending across the opening. A semi-circular arch springs to a point approximately 8' above this beam. The rows of bricks surrounding the curving tops of the windows angle in, so that the recessed brick bands giving the wall its pattern get longer until they reach the full height of the 6'-high keystones. The Clinton Street façade has four of the rectangular ornamental terra cotta panels, one on each side of the end bays, set 2' below the terra cotta band that surrounds the building. The inside panels are located equidistant from the sides of the window openings.

The entrance to the building is in the center bay flanked on each side by the four large window openings. The window above the doorway is the same configuration as the other windows, except it terminates 12' above the sidewalk instead of 8'. The doorway consists of pair of metal doors with rectangular panels. The double doors are flanked by pairs of metal panels. There are four-light metal transoms topped by a metal cornice over each pair of panels. The cornice extends approximately 1' over the entrance doors and is supported by metal brackets.

Along Milwaukee Avenue, the building has a short elevation. It extends 28' and contains on blind opening the size of the window openings along Clinton Street. The opening is filled with brick over a concrete base. Like the end bays on Clinton, this arched opening is topped by a terra cotta keystone and flanked by rectangular terra cotta panels. The wall surrounding the opening juts in and extends another 11' along Milwaukee Avenue.

The east elevation of the building is comprised of two sections. Overall it extends 117'

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along the tracks. The section to the south is 112', and the section to the north is 105'. On the north end the brick and terra wall extends across the wall to a point 9' from the bottom of the terra cotta band that encircles the building. Between that point and grad level the walls consist of thin steel plates set between I beams. The beams are sheathed in concrete on the exterior. Slender 4'8" flat pilasters mark where the I beams are located. At the south end of this wall a 13' wall runs east west. There is a 12' opening in this wall so that coal cars could go inside the building to dump their load into bunkers. At the west end of this opening the 112' section of the wall runs to the south end of the building. Above the grade of the tracks, the south wall contains three blind arches set 22'3" from the north edge of the wall and 34'3" from the south end. The arches are 21'6" apart from one another. All of the arched openings are infilled with cream-colored brick. The arches are 12' high by 14' wide. The angled pattern of the brickwork, ending in a three-part terra cotta keystone matches the pattern of the tops of the windows on the west side of the building. The sills are terra cotta. The sills rest on a six-row band of brick that rests on a 2' band of terra cotta that forms the base of the building at the track level. Beneath the tracks, along the entire east side of the building, there is 5' of track ballast, then a 4' wall of enameled brick ending in a 1' band of terra cotta coping. Underneath the coping there is an 8' wall of enameled brick punctuated by a pair of steel double doors and nine 3/3 windows that are each 6' high and 5' wide. Each has wrought iron guards. Five of the windows are located in the north section of the building. Four are located in the south section. One window is centered under the south blind arch; one is centered under the middle blind arch. The pair of doors is under the north blind arch. The entire east wall rests on a 1-1/2' stone base.

The south elevation is 41' wide, extending along Lake Street. The street is 17' below the level of the railroad tracks. In the center is a tall arched window that is 27' high by 14' wide. Its size and configuration matches the windows along Clinton. It also rests on a stone base. Like the end bays of the Clinton street elevation, the window is flanked by ornamental terra cotta panels containing the initials, C& NW RR. Each panel is located 4' from the edge of the end walls. Beneath track grade, extending east from the edge of the building is a section of ballast, a band of terra cotta and enameled brick resting on a stone base. The dimensions are the same as those at the south end of the east wall. At the edge of the building, where the enameled brick under the terra cotta band ends, there is a paneled brick wall that extends along Lake Street but is not part of the Power House property.

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INTERIOR

The interior of the Power House contains four spaces. The entrance off of Clinton Street opens into a small reception room that is 9' deep x 14' wide. Opposite the front entrance is a doorway to a 22' deep x 12'6" room that served as the engineer's office. To the north is a space that served as the boiler room, which contained the boilers that converted coal to steam, which was then used to heat the train station and heat the cars in the winter, if they were waiting for the locomotive to couple on, while they were resting in the station. This room has an irregular shape. The west wall, along Clinton Street is 124'9"; the north wall extends 33' east, then turns at an obtuse angle, along Milwaukee Avenue 27' to the east wall. The stack is located north of the east-west wall, on the west side of the building. The east wall is 105' long. The south wall extends 19' west, then jogs north 14' and west 33' forming the edge of the engineer's office and the reception room. To the north is a space that served as the engine room. It contained steam powered engines that generated electricity for the station, the cars of the trains and the surrounding neighborhood. This space is rectangular, measuring 109'6" along Clinton Street by 37'3" along Lake Street.

The interior of the reception room has walls trimmed out in cream colored terra cotta and matte green finish Grueby architectural tile. The baseboard is terra cotta. Above it are seven rows of oversize rectangular Grueby tiles. These tiles are topped by broad molded bands of cream-colored terra cotta. A pair of 6/6 windows were designed in the north and south walls to overlook the boiler room and the engine room. The windows facing north have caved in; those in the south wall are in very poor condition but remain in place. The broad molded terra cotta bands extend down and form the sill line of the windows. Walls above the terra cotta trim have been plastered but are also in very poor condition. The interior of the engineer's office also has terra cotta baseboard and Grueby tile wainscot topped with a broad band of cream-colored terra cotta. At the west end of the north wall is a pair of 6/6 windows overlooking the boiler room. In the center of the south wall is a small space that held a conveyor and a broad 8/8 window in deteriorated condition, and a 1-1/2' opening in the wall leading to a gallery that once lined the north, west and south walls of the engine room and a staircase that led upstairs to a room that accessed the track level and downstairs to the ground level of the engine room.

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The boiler room, which is located on the north side of the building, is one story deeper than the engine room, which is located on the south. From the boiler room's reinforced concrete floor to the roof the wall is 148' high on the west side of the building and 148' high on the east side. After the railroad cars brought coal from the siding that entered the building, it was dumped out at the bottom of the cars into hoppers. The hoppers were located at street level. The coal was then stored in six bunkers and fed into the boilers, which converted water to steam. Above the boilers there was a maze of pipes. Large steam pipes extended through large circular openings in the south wall of the boiler room. These pipes fed the steam into engines located in the south room where steam power was used to generate electricity. In the northeast corner of the boiler room, at the level of the entrance to the building, there is a large opening where heat was expelled from a flue pipe into the flue of the smoke stack, emitting gases into the atmosphere. Beneath the floor is a 13'5" space that contained the ash pits, where ash was to be carried off in cars on rails located in the tunnel system beneath Chicago streets. This level is actually the third level beneath the entrance level on Clinton Street. There are no ornamental finishes in this room. The walls are all common brick. Open steel trusses with large steel beams above them criss-cross the room, beneath the ceiling, which slants down from east to west. These steel supports originally supported the tall brick cooling tower that was removed from the roof in 1942. The room is lit by five of the large arched windows, one located over the entrance lobby. The boiler room space extends beneath the lobby, which is supported by steel beams.

The engine room is one floor below street level, one level up from the floor of the boiler room. It is 124' from the floor of the room to the ceiling on the west side of the building and 121' on the east side. Three sides of this room have the matte green Grueby architectural tile in the form of rectangular blocks extending from cream colored molded baseboard the floor to cream colored terra cotta molding. Above the molding the walls are common brick. On the south and west walls, which have windows, the tile extends up 37' from the floor on the sides of the windows and 30' from the floor to the sills, which are formed by broad molded bands of cream colored terra cotta. The top of the Grueby tile is capped by a broad molded band of cream colored terra cotta that extends around the tops of the windows framing them. This band continues around the entire room, including the east wall, which has no Grueby tile. The configuration of cream colored terra cotta, Grueby tile and common brick continues on the north wall of the engine room although there are several openings cut into the wall. There is a cast iron staircase

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with a cast iron balustrade and simply ornamented newel posts that leads from the east end of the north wall up to the entrance to the engineer's office that has a 4/1 window immediately adjacent to it. The floor of this doorway is 21' from the ground level. At the west end of the wall there is the pair of 6/6 windows that open into the reception room. When this space served as an engine room there was a mezzanine that extended at the 21' level on the north, west and south sides of the room. The east wall of the room consists of three common brick columns that extend to the cream colored terra cotta band. Beyond the columns is a machinery room that is located under the railroad tracks and is not part of the power house. A large steel eye beam intersects the columns. Above the terra cotta walls are of common brick. Although they were removed when the engines were taken out of the room, there were originally catwalks over the engines and an overhead crane used to make repairs and move equipment around. The ceiling of the room is topped by an open metal truss that slants downward from east to west at the roofline. Beneath the engine room there are underground maintenance tunnels.

There is a second door up a level accessed by the staircase in the north wall of the engine room. This leads to a small room with stairs up to a small landing. To the south of the landing are four stairs to an opening leading to a platform that overlooks the engine room. To the east is a small passageway leading to the tracks where the railroad cars pulled in to deliver coal into the hoppers. Above this level is a platform and an opening to the motor room, which was 8'4" x 11'. To the south was a 15' x 11' space that served as an ash hopper.

Water damage, holes in the roof and general overall neglect has led to some deterioration of the building, but other than the removal of the machinery, including boilers and engines, there is little that has changed over the years. Its integrity is excellent.

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SUMMARY

The Chicago & North Western Railway Power House, built between 1909 and 1911 and designed by the Chicago architectural firm of Frost & Granger, meets Criterion A and Criterion C for listing on the National Register of Historic Places. The period of significance for the Power House is from 1909, when construction started, to 1954, the fifty year cutoff for significance to the National Register.

The Chicago & North Western Railway Power House is significant under Criterion A for its association with the transportation history of the city, as the energy facility that provided steam heat to the train station, the train yard and the standing passenger cars as well as the various other nearby facilities that were associated with the operation of the railroad, including the Interlocking Tower (where switching took place, just east of the Power House), the freight houses (where less-than-car-load shipments were held), and the Erie Street Coach yard (where passenger cars were kept heated so as not to freeze up).¹ In addition, its generator provided all of the electricity to the buildings that were included in the complex of buildings making up the Chicago and North Western Station.² The Power House was part of a railroad whose lineage dates back to the beginning of train transportation in Chicago. Operating until c. 1962, when the building was retired, the Power House is the only remaining structure associated with providing energy for use by the Chicago & North Western Railway and one of two remaining railroad power houses in Chicago.³ The other structure, built for Chicago's Union Station, was designed by Graham, Anderson, Probst & White, in the mid 1920's. Both power houses were contemporary with the train stations they served, although the power house associated with Union Station is located away from the station, with no apparent visual connection. The North Western's power house was part of an enormous complex. Some less distinguished sections that were attached to the head house

¹ Interview with Fred W. Ash, May 20, 2004, and Fred W. Ash, "A History of C & NW's Chicago Passenger Terminal Part II: Birth of Madison Street Station," *North Western Lines, Summer, 1991*, p. 30. Joe Pierson, the archivist for the Chicago & North Western Historical Society, notes that there were once other power houses in the area of the Coach yard.

² *Ibid.* Although it is known that the plant provided electricity for the station, it is uncertain whether it sold electricity to the surrounding neighborhood. In an interview by the current owner of the building with a former employee of the railroad, the employee said this was the case. Joe Pierson, archivist for the Chicago & North Western Historical Society, has not seen this substantiated.

³ It is possible that another structure that supplies power to the railroads in Chicago will be discovered, but it is not likely it will be as distinguished as either the Union Station Power House or the Chicago & North Western Railway Power House.

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remain, but the much-admired terminal building commonly referred to as the "North Western Station" was demolished in the 1980s and replaced by a high rise building, designed by Murphy/Jahn in 1987, that contains offices for Citicorp Center and terminal facilities.

The Chicago & North Western Railway Power House is also eligible for listing on the Register under Criterion C as an excellent example of Beaux Arts Architecture, incorporating Italian Renaissance Revival elements that complement Frost & Granger's Renaissance Revival design for the Chicago & North Western Station. It is built of cream colored brick with recessed courses, resembling the stone wall surfaces that are characteristic of Beaux Arts architecture. Its grand arched openings and flat roof are features that Beaux Arts buildings share with those designed in the Italian Renaissance Revival style. Designed at the same time Daniel Burnham and Edward H. Bennett were completing their Plan of Chicago, the North Western Railway's complex of buildings, including the Power House, was designed as a unified urban composition, like the buildings incorporated in Burnham and Bennett's Plan. Both were based on the 19th Century French tradition of the Ecole de Beaux Arts, where Alfred Granger had studied. Charles Frost and Alfred Granger, both of whom were married to daughters of Marvin Hughitt, president of the North Western Railway, designed a great many stations for the company. Although its function was primarily utilitarian, the Chicago & North Western Railway Power House was designed as a high style building, and it continues to display a high level of artistic value, craftsmanship and integrity.

HISTORY: Railroading in Chicago and the Growth of the Chicago & North Western Railway

The history of the Chicago & North Western Railway Power House is inextricably linked to the story of railroading in Chicago, the history of the NorthWestern Railway and the development of construction of the North Western's Chicago railroad stations. During the years that the Chicago & North Western Railway was in business, Chicago was the railroad center of the country, and its station played a major early role in the lives of both immigrants, arriving to make their home in Chicago and of commuters, who streamed in and out of the city from their homes in the north and northwest suburbs on a daily basis.⁴ Providing heat and electricity for railroad facilities, the Power House was an integral, important part of the functioning of the railroad station.

⁴ Today the rail line that belonged to the Chicago & North Western Railway until 1995 is run by the Santa Fe Railroad.

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The first railroad line to provide service to and from Chicago, the Galena and Chicago Union, was chartered in 1836 and built to connect the city with lead mines in Galena. It was an ancestor of the Chicago & North Western,⁵ which was formed through a series of mergers in the mid 1860s. In 1848, thirteen years after the charter was granted, the railroad's first locomotive, named the "Pioneer" and currently installed in the Chicago Historical Society, arrived in Chicago and within a few years the line was completed as far as Elgin. This and other steam-powered locomotives soon carried trains that criss-crossed the country from Chicago. Located in the center of the United States, Chicago provided markets where Midwesterners could sell their agricultural produce, lumber and other products and could buy goods manufactured in the East. Coal and Mineral ore were regularly transported through Chicago. Grain markets, meatpacking, steel manufacturing and other industry flourished: Chicago's population skyrocketed. The railroad provided the means for workers from all over the country as well as foreign immigrants to come to Chicago for employment.

The railroad also provided the means for the affluent to move out of Chicago and led to the development of the suburbs. As Chicago's population grew, and the city became more crowded and polluted, wealthy merchants, businessmen, doctors and lawyers all looked to move outside the city, and speculators bought up land where the affluent could purchase or build homes. The main line of the Chicago & North Western Railway, which runs north along the lakeshore, enabled the growth of Chicago's North Shore Suburbs⁶

EARLY TRAIN STATIONS: The construction of the Railroad's First Power House.

In 1848, the Galena and Chicago Union built its first depot south of Kinzie Street and east of Canal Street, on the west side of the north branch of the Chicago River, several blocks west of the station that was to be built in 1911. As the railroad expanded, this station was enlarged. Then, in 1853, the Galena completed a two-story brick passenger depot south of Kinzie facing Wells Street. A story was added in 1863. These were small buildings. The

⁵ Carl Condit, Chicago, 1910-29: Building, Planning and Urban Technology, Chicago: The University of Chicago Press, 1973.

⁶ In the mid 1850s, Walter Gurnee, who served two terms as Mayor of Chicago, purchased land on speculation in areas that became the villages of Glencoe, Winnetka, Highland Park and Lake Bluff. He also became president of the railroad that, in 1866, turned into the Chicago & North Western Railway and built stations near where the affluent could settle and commute into Chicago. "Walter Gurnee Blazed Trail to North Shore", *Daily Herald*, November 25, 2001

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Wells Street station burned in the Chicago fire of 1871 and was replaced.⁷ But no large monumental building was constructed until April, 1880, when the prolific architect, W. W. Boyington completed plans for a new Wells Street Depot for the Chicago & North Western.⁸ The railroad's new station was imposing, a red brick Queen Anne building with sandstone trim that stood 4-plus stories and had a tall square clock tower, topped by a steep pointed roof that was equal in height to the building. It contained a richly appointed grand gentlemen's and ladies' waiting room, 144' x 60', which occupied almost an entire floor and was intended exclusively for intercity passengers. Adjacent was an equally lavish dining room. There were two floors of offices above the waiting room; below was a 126' x 56' ground floor passenger waiting room for commuters. It had a modest shed, but business expanded rapidly, with immigrant travel growing and shipping playing a huge role, as Chicago became the mail order center for catalogue retailers, Sears Roebuck and Montgomery Ward.

The growth in railroading that took place in the early 1890s forced the expansion of the railroad facilities in 1892. Additions included the construction of a boiler and engine house that was to be located a quarter of a mile west of the station. It was a brick building containing four boilers, two Thompson-Houston dynamos, two Edison dynamos and two steam pumping engines. The dynamos generated electricity for 60 carbon arc and 950 incandescent lamps. The steam pumps were used to supply hydraulic and pneumatic pressure for an installation of interlocking switches and signals in the passenger coach yard. The exhaust steam from the boilers was used to heat the depot buildings, replacing separate furnaces in each building. But train congestion and commuter/immigrant traffic could not be sufficiently alleviated by this change. Nor were traffic and congestion helped by the construction of a new annex to the station and new platforms, additional tracks and sheds-- completed in 1902. To complicate issues, the city passed an ordinance in 1901 that forced the railroads to elevate their tracks above city streets to allow for sufficient height to create underpasses.⁹ Today the boiler and engine house is gone. The Merchandise Mart was built on the site of the Chicago & North Western Railway's 1880 station.

⁷ All of these earlier buildings are illustrated in "History of the Chicago & North-Western Railway System", a pamphlet published by the railroad in 1910. Collection of Chicago Historical Society, Chicago.

⁸ William W. Boyington, whose most famous work was the Chicago Water Tower and Pumping Station, designed the first building to house the Chicago Board of Trade, hotels, and numerous other Chicago buildings including and the Union Depot which preceded the present Union Station. This station was built at the same time as the station he designed for the Chicago & North Western Railway.

⁹ Much of this information came from an article titled "A History of C & NW's Chicago's Passenger Stations Part I: The Early Depots", published in the Spring, 1991, issue of *North Western Lines* by Fred Ash.

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THE MADISON STREET STATION

Plans were undertaken in 1905 for the construction of a new vastly expanded depot for the Chicago & North Western Railway. The rapid growth of Chicago, its suburbs and increase in freight traffic forced the railroad to expand its facility beyond that possible on Wells Street. In 1905, Marvin Hughitt, the railroad's president hired John F. Wallace, former Chief Engineer for construction of the Panama Canal, as consulting engineer. And the railroad began acquiring land. The area selected was easily accessible from the business district, just west, across the river, on land extending from Madison Street, where the head house was to be located, to the intersection of Milwaukee Avenue and Clinton Street, the site of the Power House. At that time, the area was made up of warehouses, and factories, run down hotels, some commercial buildings, tenements and residential structures. Early photographs from the *Chicago Daily News* showing the station under construction reveal that the area was a hodge podge of mostly one to six-story buildings.¹⁰ Historian Perry Duis notes that this was part of the west side levee, an area made up of brothels and other unseemly institutions.¹¹ The Ryerson iron and steel warehouse occupied the site of the power house.¹² All in all, 455 buildings were to be removed. The process was long, complicated and arduous, complicated by law suits filed by building owners hoping to be better compensated for their taking, and a location crossed by the Lake Street Chicago & Oak Park Elevated structure and blanketed with a vast network of telephone, gas pipes and electric conduits. On the approach north the terminal structures had to be designed to cross over the intersection of Washington, Randolph and Lake Streets. The process of acquiring land and completing construction took six years, with the Chicago & North Western's new station opening June 4, 1911.

The Power House had to be designed around the location of the required overhead tracks. This meant that the front of the Power House on Clinton Street would appear to be much higher than the side facing the tracks. To accommodate the transfer of materials, a large part of the power house was underground. Coal was delivered in rail cars at the upper, railroad-track level of the building, on the east side, where the building height appears to be a

¹⁰ "Chicago and North Western Railroad Station under Construction", photographs from the *Chicago Daily News*, 1902-1933, negatives collection, Chicago Historical Society, Chicago

¹¹ Perry R. Duis, "Myths and Facts about the Chicago & North Western Terminal and its History," December 8, 1980 Clipping Collection, Chicago Historical Society.

¹² Ash, "A History of C & NW's Chicago Passenger Terminals: Part II: Birth of Madison Street Station", *North Western Lines*, Summer, 1991, p. 21.

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single story, since that is all that can be seen above the tracks. The track elevation actually enabled easy unloading. The cars pulled into a siding in the northeast corner of the building and the coal was dropped into hoppers. It then went into storage bunkers until it was fed into the boilers that were located in the north room of the building. The boilers were stoked, creating steam that was piped out to heat the railroad buildings and passenger cars. Smoke from the boilers traveled through a large flue opening that lead into the chimney stack that extends 227' from the sidewalk on the northwest corner of the building.¹³ The coal ashes were carried off in a separate set of ash storage bins and conveyers to the sublevel of the building, where they were hauled out in four-wheel electric locomotives by the Illinois (later Chicago) Tunnel Company, established in 1906, very shortly before the station was built, through the tunnel system that is located under the entire central business district of Chicago. The steam power that produced heat also drove the engines located in the south half of the building that generated all the electricity for the station. These engines were controlled by a switchboard located on a gallery at the building's south end. This switchboard controlled all the main line switching devices, electrically operated motor starters and speed regulators, and electrically operated field rheostats and switches for controlling station lighting.¹⁴

Because the Power House was a significant part of the railroad operation, many aspects of its equipment and capacity were specifically described in the complementary booklet that was printed to celebrate the opening of the station. The booklet devotes four pages out of 24 to describing the Power House equipment: the boilers, the superheaters, the stokers, coal and ash handling equipment, engines, the turbine and generator unit, the electrical equipment, the switch board, condensing apparatus, the boiler feed pumps, the feed water heater, the air compressor, vacuum pumps, drainage, the oiling system, the internal workings of the chimney and the plant capacity, which was intended to be, when completed, 4000 KW. It appears from the description of coal and ash handling in the booklet that the system was automated. It notes that "Pan type conveyors are to be used for conveying coal from the cars to the pivoted bucket conveyor, and an inclined pan type conveyor is used for conveying ashes to the ash storage bins."¹⁵

Prior to World War I, it was not unusual for factory buildings and manufacturing plants to have their own free standing power houses. In her book, *The Works: The Industrial*

¹³ The stack extends 245' from the boiler room floor, below street level.

¹⁴ *North Western Passenger Terminal Chicago*, Illinois. Compliments of the Chicago & North Western Railway Company, 1911. This booklet was published for the station's opening, June 4, 1911.

¹⁵ *Ibid.*

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Architecture of the United States. Architectural historian Betsy Hunter Bradley noted that even in urban areas where central station power was available, manufacturers chose to operate their own electric power plants, just as they relied on their own steam engines. Chicago area resident, Jack Barriger, an expert on railroad history, noted that railroad stations couldn't count on Commonwealth Edison for electricity.¹⁶

The Power House cost a relatively small amount of money, \$810,000, compared to the overall cost of construction of clearing the land and building the station, which was almost \$24,000,000. The size of the Power House was also relatively small compared to the huge complex of the North Western Station, yet it powered the buildings that enabled the entire complex to function. Thirty five years after the station opened, the June 27, 1948, *Chicago Tribune* wrote, "It is part of a city within a city. The article noted that "the Station has its own power and light plant with an output equivalent for the requirements of a city with a 15,000 population".¹⁷ Indeed, the station was a small city, with a head house that was 320' x 218, yards that were 320' wide and 1,072 long and three miles of train sheds.¹⁸ The interior of the four-story main building had many of the amenities of a town besides those related to train service (like a grand waiting room, a ticket office, baggage rooms and offices, and carriage concourses). It had a dining room, a tea room, a kitchen, its own butcher shop, a drug store, a news stand, telegraph services, rest rooms, a smoking room and a barber shop. The importance of the Power House to the railroad far outweighed its cost or size. It served the station until the early 60s, almost a decade after coal was no longer generally burned and heat was provided by gas.

Architectural historian Betsy Hunter Bradley discussed the typical features of an industrial power house, and the Chicago & North Western Railway Power House contained numerous features that she notes as characteristic of a building that contained boilers and steam-driven generators to produce electricity:

1. It is an isolated building, generally detached from the other structures associated with the functioning of the Chicago and North Western Railway. There was always the threat of steam boiler explosions, so that boilers and engines were housed in free standing structures.

¹⁶ Phone interview, Jack Barriger, February 23, 2004.

¹⁷ Clipping dated June 27, 1948, from the *Chicago Tribune*, in the collection of the Chicago Historical Society.

¹⁸ *Ibid.*

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2. It has large operable steel windows. To prevent boiler explosions through careful maintenance and inspection, it was necessary to have large windows to provide good natural lighting. This enabled operators to keep the equipment clean and constantly inspect it. Expansive windows with operable sash were recommended
3. It is a two-part facility, containing two rooms, to keep the boilers and engines separate from one another. This division of space kept the coal dust produced by the stoking of boiler fires away from the machinery and gauges in the engine room.
4. It is built of non-combustible materials. The foundation is concrete; walls are brick and stone masonry. There are wide brick pilasters faced in tile in the engine room.
5. It has no interior columns. The boiler room, which, until 1942, supported a large cooling tower, is spanned by large steel beams. The engine room is spanned by large steel trusses.
6. There is a brick fire wall separating the boiler and generator rooms. The side-by-side rooms are similar in size and plan, but separate from one another. Since fireproofing was of prime importance, it was imperative that the rooms did not open into each other.
7. Coal bunkers were positioned above the boiler, and there was a conveyor system that both delivered coal and removed ashes. This system is described in the pamphlet that was published when the book opened. In some factories, this layering of activities made the boiler house taller than the adjacent engine. In the Chicago & North Western Railway Power House this was not the case.
8. It had an electric-driven traveling crane in the engine room. This facilitated the moving of large pieces of equipment in the engine room and was a typical feature.
9. It has a very tall brick chimney built of Custodis radial bricks. Typically power houses had a cylindrical chimney rising high into the air. The chimney in the corner of the boiler room rises 245' from the boiler room floor. This produced a draft that facilitated the combustion of coal (which heated the water in boilers to produce steam) and carried off the gases that resulted from the combustion. Radial bricks, which were made from a refractory clay and had curved surfaces, began to appear in the United States (having been made by the firms of Alphonse Custodis and H.R. Heinicke in Europe) in about 1900. They were typically 4" x 6" with angled ends that were part of the radius of the chimney's circular plan. Because of the larger sizes of the units, a chimney of radial brick incorporated less mortar and was stronger and less expensive to construct than a chimney of

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standard brick. It introduced a sleek, uniform surface for the tapered form of the radial brick chimney.

10. The interior spaces have special features. Engine rooms were frequently finished in a first-class manner befitting its importance.¹⁹

Although the boiler room is only a functional space with common brick walls, clearly because of the inevitable soot, the interior walls of the Power House engine room have elegant features. The south, west and north walls are common brick with a high wainscot finished in Grueby tile that is a soft green, their signature color. The tile is topped by a molded terra cotta band that is a rich cream color. The band, which surrounds the tall graceful arched window openings, is broad, in scale with the vast monumental interior space of the engine room. It was common for the interior of the engine room in power plants to be finished in beautiful tile. Sally A. Kitt Chappell points out in her book on the Chicago architectural firm of Graham, Anderson Probst and White that the turbine room of Chicago's Crawford Avenue Generating Station, built in 1924-25, was as stunning as the interior of the engine room at the North Western Railway Power House. She said that "While the wall surface of the interior of the boiler room had the utilitarian character necessary to resist coal dust, the turbine room had, and indeed still has, the air of an industrial palace". The interior of the Crawford Station was clad in white tile pieces of different sizes. Dr. Chapell described the "showplace quality of this immense space and the attention paid to architectural detail."²⁰

The Grueby tile that graced the interior of the engine room, along with the huge arched windows that flooded the interior with light, contribute to making the interior of the engine room majestic, many steps above an ordinary utilitarian space. Grueby pottery and tile is highly treasured. In his book on Art Pottery in the United States, Paul Evans wrote, "It was Grueby's technique and the application of it...which made their name synonymous with the highest quality of matt-decorated artware"²¹ William Henry Grueby was born in 1867. He started a plant in 1890 in Revere, Massachusetts, and built a firm in Boston a year later for the production of architectural tile and Art Pottery. Pieces were biscuit-fired and then glazed with Grueby's matt enamels. The tiles and pottery were created in blue, yellow brown and

¹⁹ Betsy Hunter Bradley. *The Works: The Industrial Architecture of the United States*. New York: Oxford: Oxford University Press, 1999, pp. 49-53

²¹ Sally A. Kitt Chappell. *Architecture and Planning of Graham, Anderson, Probst and White, 1912-1936*. Chicago: The University of Chicago Press, 1992, p.

²¹ Paul Evans. *Art Pottery of the United States: An Encyclopedia of Producers and Their Marks*. New York: Charles Scribner's Sons, 1974, pp. 118-121

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other colors, but the most successful, by far was the cucumber Grueby green.. Grueby's matt green was well received and frequently imitated. Soft in texture, and varied in tone, it resulted from careful firing and not from subsequent treatment with sand or acid. Because dozens of cheaper copies were made at other factories, the art pottery firm went bankrupt. In 1909, at the time that the Chicago & North Western Railway Station was being built, Grueby started a new company, the Grueby Faience and Tile Company for the production of architectural tiles using his glazes and processes. The company stopped making Art Pottery in 1910, concentrating on producing architectural tiles until 1920, when the company was sold. Examples of Grueby's work are to be found in most important museum collections of Art pottery.

ARCHITECTURE:

The architecture of the Chicago & North Western Power House is majestic, equal in quality to the station's head house and complementary to the architecture of the station's other auxiliary buildings. It was designed in the Beaux Arts Style, a tradition not associated with Chicago architecture, more typically found in New York buildings like the Metropolitan Museum of Art (1895, Richard Morris Hunt) and Grand Central Station (1903-1913, Reed and Stem; Warren and Wetmore) or Washington's Union Station (1907-1908, Daniel Burnham). Beaux Arts architecture was a variation of classicism—formal and symmetrical, but with more exuberant surface ornamentation than other classically-derived styles.²² Most Beaux Arts buildings were stone. The walls of the Power House are cream colored brick but have a rusticated surface treatment, with the facades designed to resemble stone, with every sixth row of brick recessed to form banding around the building. Some Beaux Arts characteristic features, like paired columns, grand stairways and lavish details are absent. But, like other Beaux Arts Buildings, the Power House is topped by a flat roof, rests on a heavy stone base and three of the four facades are symmetrical, with monumental arched openings, similar in size to those on the front of Grand Central Station. Nine of the arched openings are on the Clinton Street façade, where the main entrance is located. All are topped by huge keystones and the building is capped by a tall parapet wall; both characteristics reinforce the grand scale of this long low building.

Because of their sense of monumentality, Beaux Arts designs were generally adopted for impressive public buildings like museums, railroad stations or structures built for

²² Virginia & Lee McAlester. *A Field Guide to American Houses*. New York: Alfred A. Knopf, 1985. p. 379.

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expositions. Occasionally the style was selected for the design of impressive mansions, such as those built in Newport, Rhode Island. The Beaux Arts design of the Power House matched these other buildings in quality, but had less applied detailing, only simple ornamental emblems, each containing an oval crossed by a banner containing the railway's monogram, "C & NW RW (a decorative variation of the line's "ball and bar" logo, a circle bisected by a slanted band containing the words, THE NORTH-WESTERN LINE).

Although the Power House was built to accommodate machinery, with people there only to keep the machines operational, and it was a separate structure from the other railroad buildings, its design was equal in quality to the headhouse of the station and complementary to the less ornamented subsidiary buildings important to the station's functioning. These other structures, built of the cream-colored brick, terra cotta and stone, are located between the north wall of the present station and Lake Street, across Lake Street from the Power House. Because the tracks are elevated, the expanse of wall along Clinton Street and along Canal Street hide the tracks, sheds and steel supporting members for the platforms from public view. On the ground level, the wall is rusticated, punctuated by arched openings. Above is a blank brick wall broken up by a long row of pilasters. There is an ornamental clock centered on the more ornamental second floor over the Washington Street viaduct. The interior of this long structure, between Randolph Street and Washington Streets, continues to accommodate suburban riders, who can enter the eight platforms at the ground level from a concourse stretching between the Canal Street and Clinton Street.

The Chicago & North Western terminal building or headhouse was four blocks away from the Power House. With a public entrance that faced Madison Street, it was the tallest, most imposing and lavish structure in the complex, featuring a colonnaded entrance portico, with grand arched openings set behind immense granite columns. Towers topped by shallow domes rose 120' on each side of the central entry. This entrance formed a monumental point of entry, inviting to the traveling public. The grand arched openings and flat roof are characteristic features Beaux Arts buildings share with Italian Renaissance Revival structures, but the terminal contains other features that make it closer in style to such elegant Renaissance Revival structures as the City Hall in Portland, Oregon (1892-1895, Whidden and Lewis) or the Racquet and Tennis Club in New York (1916-1918, McKim, Mead and White). It was built of stone, topped by a balustrade, had a rusticated base and quoining and, clearly defined stories of windows—one row containing windows with projecting stone lintels. On the interior, the waiting room was a vast monumental space, lit by semi-circular

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windows set just under a barrel-vaulted ceiling covered with Guastivino tile. The room was reminiscent of a Roman atrium.

The planning of the new Chicago & North Western Station and the creation of the Burnham Plan took place roughly at the same time. Plans for the station were announced in 1906, and the building opened June 4, 1911. Daniel Burnham and Edward Bennett began work in 1906 and produced their final document in 1909. Both works addressed the issue of removing tracks from grade level. In his 1980 paper on the importance of the station, Perry R. Duis points out the similarities. The Plan said that "walls and pavements should be as nearly white as possible, to enhance the special lighting for the viaducts and would facilitate street sanitation by showing filth and calling attention to its need for cleaning. The railroad made the walls white ceramic tile.²³ The tiled walls are adjacent to the Power House and complement its cream-color brick. Duis notes that the decorative wall along the west side of the tracks in Burnham's plan very closely resembles that which was built. Burnham envisioned a continuous masonry wall, with Classical trim resembling a Roman Aqueduct.²⁴ Burnham saw it as not only practical and interesting but "even a grand architectural detail lending orderly distinction to that part of the city."²⁵ The continuous arches in this west wall, along Clinton Street, terminate at Lake Street, but are repeated in the very much grander arched fenestration of the Power House.

The Chicago & North Western Power House, as well as the headhouse and all the other buildings of the station complex, was designed by Charles Sumner Frost and Alfred Hold Granger, who both were Classically trained. They had graduated from the Massachusetts Institute of Technology's architecture program: Frost in 1876 and Granger in 1887. Frost had worked in the Boston office of Peabody and Stearns, moving to Chicago in 1882 to establish a partnership with Henry Ives Cobb. That partnership ended in 1898. Granger, after graduating from MIT, continued his studies at the Ecole des Beaux Arts in Paris. When he returned, he entered the office of Shepley Rutan and Coolidge and was assigned to Chicago to supervise his firm's designs for the Renaissance Revival Chicago Public Library (today the Cultural Center) and the Art Institute of Chicago in the early 1890s. Frost and Granger formed their partnership in 1898.

²³ Duis. Discussion on the Burnham Plan.

²⁴ *Ibid.*

²⁵ Daniel H. Burnham and Edward H. Bennett. *Plan of Chicago*. Chicago: The Commercial Club, 1909. Reprinted by Princeton Architectural Press, New York, 1993, p. 72.

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The firm of Frost and Granger was selected as architect for the station at least partially because they had experience designing a train depot, having, in 1903, completed the LaSalle Street Station, a structure aptly described as a tall office building located over a monumental entrance. It has none of the complexity or design cohesiveness or originality evident in the Chicago & North Western Railway Station complex. A more compelling explanation would be their relationship to Marvin Hughitt, the president of the railroad. Each had married one of his daughters. Frost and Granger, however, evidenced talent in the many handsome small suburban stations the firm designed for the railroad. Hughitt's selection of Frost and Granger was prudent because they proved themselves as excellent designers. An article in the August, 1905, issue of the *Architectural Record* confirmed his choice. It stated that their design of buildings "reflected moderation and was praised for its civilized home-like air and gentility and was even more valuable socially than architecturally." It also noted, regarding railroad stations, that "the new building promoted by the American railroads was at last falling into the hands of competent architects with the result that from the comparative standpoint there has been possible greater improvement in this class of buildings than any other."²⁶ During his career Charles Frost, with Cobb, Granger, or on his own, designed over 80 railroad stations, many for the line of the Chicago & North Western Railway. The engineering firm chosen by the architects for the complex, E.C and R.M. Shankland, was equally competent. Edward Shankland had worked on the Reliance Building addition in 1895, the Fisher Building in 1896 and the partners had worked on the LaSalle Street Station and the Chicago & North Western Railway Office.

The Chicago & North Western Railway Power House has survived with excellent structural and architectural integrity. It remained in service until approximately 1962, functionally adapting to change as the years went along. As an example, a wooden water tank was added in 1937-38 to supply water to the first diesels for the first streamlined "400" train, thus signifying the adaptation to a new era. The Power House continues to serve as an excellent example of a high-design railway power house. There are some, but not an enormous number, of other fine examples of steam railroad power houses found around the country. The Denver Tramway Powerhouse and the Toledo Traction Company Power Station, which are listed on the National Register, provided electricity to power trolleys not steam trains. A particularly handsome example of a steam railroad power house is the Grand

²⁶ *Architectural Record*, August, 1905. This information quoting the *Architectural Record*, is from an unpublished essay, "Frost and Granger, Depot Architects" by Thornton Waite, 1324 Corinne Avenue, Idaho Falls, ID 83402.

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Canyon Powerhouse, in Grand Canyon National Park. This plant was built by the Atchison, Topeka and Santa Fe Railroad in 1926. Constructed much later than the North Western Power House, it was a reinforced concrete structure with native stone veneer walls and a decorative wood cornice, designed by an unknown architect, in the Arts & Crafts style. The Central Station Power House, built in Memphis in 1910, is another example. It provided steam to the Illinois Central Railroad that passed through Memphis and heat to the station and office tower. It is noteworthy for its decorative brickwork, 100' brick stack and its many large windows.

In Chicago, there are no existing power houses that provided steam, associated with the Chicago & North Western Railway other than the one on Clinton Street. Joe Pierson, the archivist for the railroad's historical society stated that there was a plant with big steam boilers located near Chicago Avenue, where steam engines were serviced. He said there is a drawing and records indicating boiler repair, but no photographs have as yet turned up. He added that there are records indicating that there were very large shops on Crawford and 40th Street.²⁷ The only major Chicago power house structure remaining, associated with the era of steam railroad is that related to the operation of Union Station. It also is a high style building designed by a prominent architect, but constructed in the mid 1920s, many years later than Frost & Granger's Power House. It is a tall rectangular building two stacks, simple in design, with tall, narrow recessed openings, very different from the long, low Beaux Arts Power House that for decades served as a significant part of Chicago & North Western Railway's operation. Having experienced few changes, the architecture of the Power House serves as a reminder of the grandeur of the railway's demolished terminal and of an age when railroading was the country's major form of transportation.

²⁷ Joe Pierson, Interview, January 2, 2004.

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Chicago & North Western Railway Power House
Cook County, Illinois

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Cook County, Illinois

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CONTINUATION SHEET

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**Chicago & North Western Railway Power House
Cook County, Illinois**

Boundary Description: Chicago & North Western Railway Power House

LEGAL DESCRIPTION

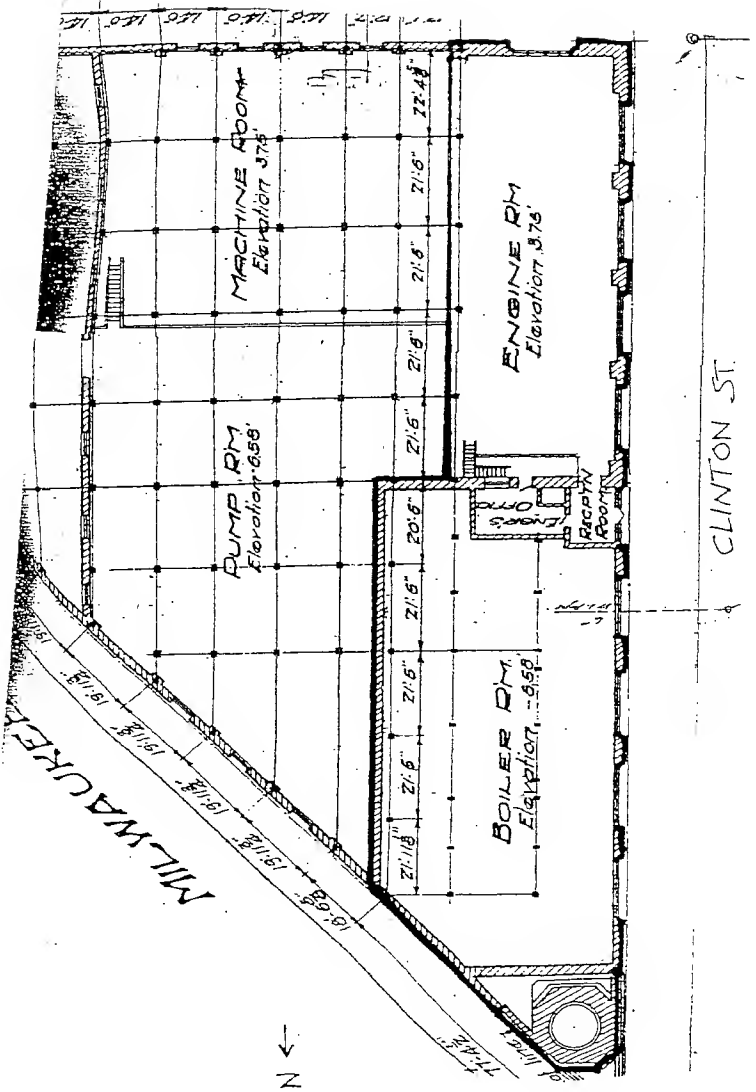
THAT PART OF LOTS 2, 3, 5, 6, 7, AND 8 ALONG WITH THAT PART OF THE VACATED ALLEY IN BLOCK 23 IN THE ORIGINAL TOWN OF CHICAGO IN THE SOUTH PART OF SECTION 9, TOWNSHIP 39 NORTH, RANGE 14, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MAY 29, 1837, DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHWEST CORNER OF SAID BLOCK 23; THENCE NORTH 0 DEGREES 00 MINUTES 00 SECONDS WEST ALONG THE EAST RIGHT OF WAY LINE OF CLINTON STREET, 273.30 FEET TO THE SOUTHWEST RIGHT OF WAY LINE OF MILWAUKEE AVENUE; THENCE SOUTH 43 DEGREES 59 MINUTES 56 SECONDS EAST ALONG SAID SOUTHWEST RIGHT OF WAY LINE OF MILWAUKEE AVENUE, 253.33 FEET; THENCE RUNNING ALONG AN ARC THAT IS CONCAVE TO THE NORTHWEST WITH A RADIUS OF 15.00 FEET AND AN ARC DISTANCE OF 9.99 FEET (SAID ARC HAVING A CHORD BEARING OF SOUTH 71 DEGREES 08 MINUTES 30 SECONDS WEST AND A CHORD DISTANCE OF 9.80 FEET); THENCE NORTH 89 DEGREES 46 MINUTES 58 SECONDS WEST 17.23 FEET; THENCE SOUTH 0 DEGREES 17 MINUTES 20 SECONDS WEST 21.51 FEET; THENCE NORTH 89 DEGREES 46 MINUTES 58 SECONDS WEST 14.06 FEET; THENCE SOUTH 0 DEGREES 15 MINUTES 38 SECONDS WEST 69.10 FEET TO THE NORTH RIGHT OF WAY LINE OF LAKE STREET; THENCE NORTH 88 DEGREES 54 MINUTES 03 SECONDS WEST ALONG SAID NORTH RIGHT OF WAY LINE OF LAKE STREET 135.01 FEET TO THE POINT OF BEGINNING. IN COOK COUNTY, ILLINOIS; LESS AND EXCEPT THE PORTION OF THE FOLLOWING WHICH LIES ABOVE A PLANE LEVEL WITH THE BOTTOM OF THE EXISTING BRIDGE FLOOR SYSTEM SUPPORTING THE RAILROAD TRACKS, AS RESERVED TO THE UNION PACIFIC RAILROAD COMPANY, GRANTOR IN THE QUITCLAIM DEED DATED NOVEMBER 1, 1997 AND RECORDED AS DOCUMENT 97144070, BEING ALL OF THE ABOVE DESCRIBED PROPERTY, EXCEPT THE FOLLOWING: BEGINNING AT THE SOUTHWEST CORNER OF SAID BLOCK 23; THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS WEST ALONG THE EAST RIGHT OF WAY LINE OF CLINTON STREET, 273.30 FEET TO THE SOUTHWEST RIGHT OF WAY LINE OF MILWAUKEE AVENUE; THENCE SOUTH 43 DEGREES 59 MINUTES 56 SECONDS EAST ALONG SAID SOUTHWEST RIGHT OF WAY LINE OF MILWAUKEE AVENUE 81.13 FEET; THENCE SOUTH 0 DEGREES 03 MINUTES 40 SECONDS WEST 105.23 FEET; THENCE NORTH 89 DEGREES 46 MINUTES 58 SECONDS WEST 15.42 FEET; THENCE SOUTH 0 DEGREES 03 MINUTES 40 SECONDS WEST 110.55 FEET TO THE NORTH RIGHT OF WAY LINE OF LAKE STREET; THENCE NORTH 88 DEGREES 54 MINUTES 03 SECONDS WEST, 40.71 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

Property Address: 211 N CLINTON, CHICAGO, IL. PIN #: 17-09-316-001

Boundary Justification: This nominated property includes the power house and the area immediately adjacent to the power house.

CHICAGO & NORTH WESTERN RAILWAY

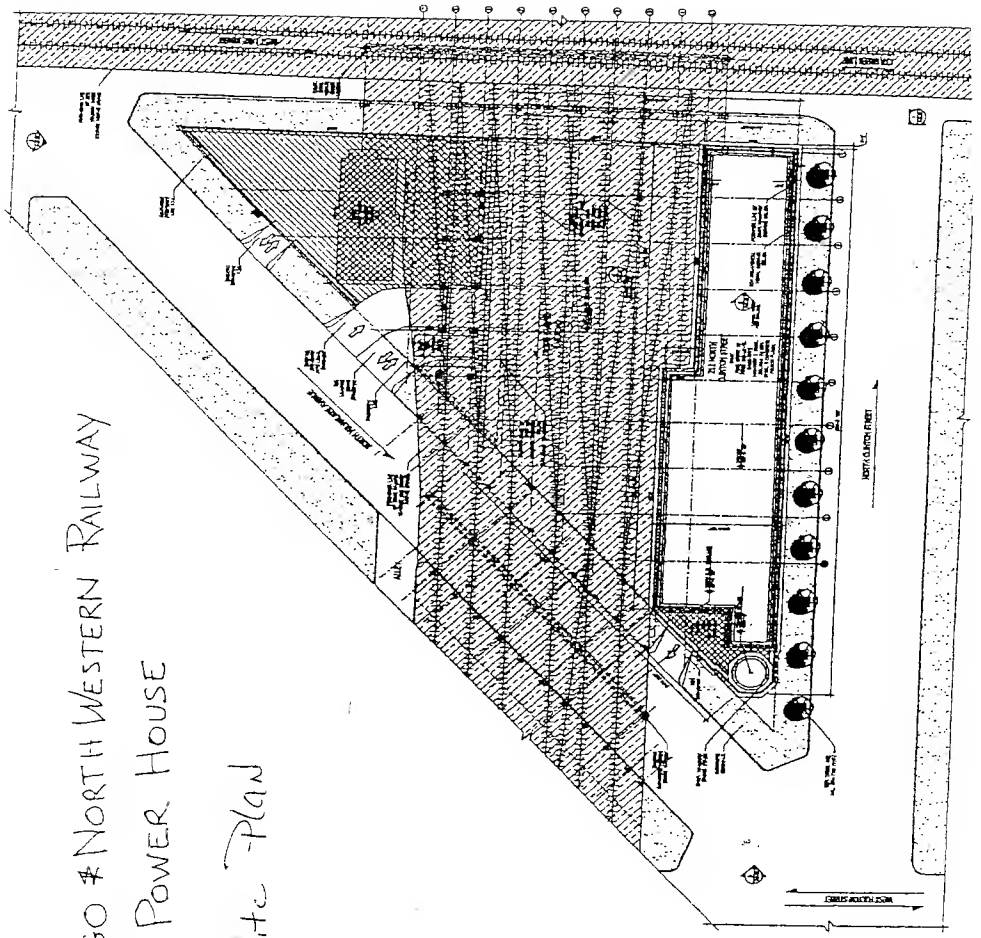
POWER HOUSE
Floor Plan



CHICAGO & NORTH WESTERN RAILWAY

POWER HOUSE

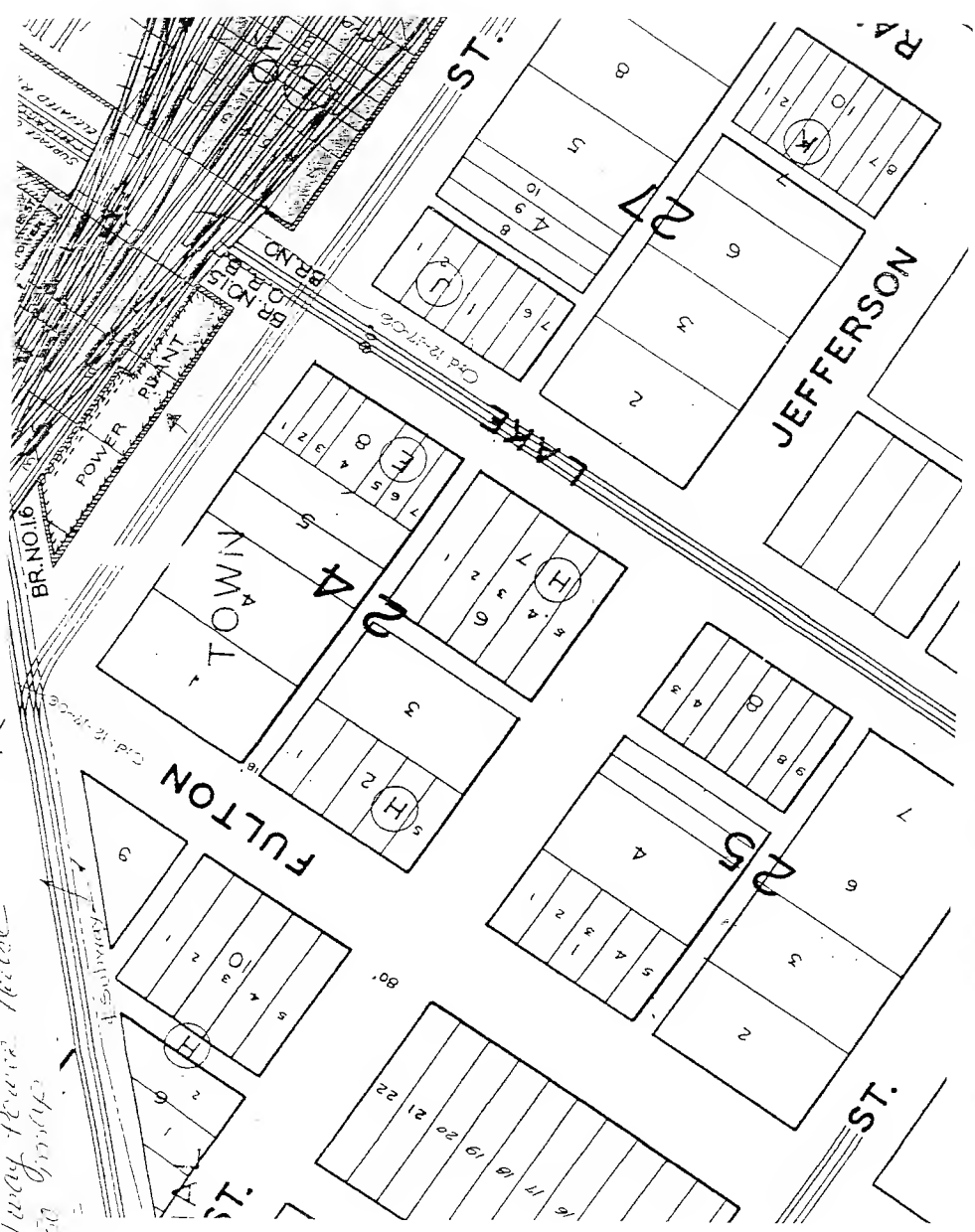
Site Plan



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Chicago & North Western
Railway Power Plant
1920 Group

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Edson_Beall@nps.gov

12/16/2004 02:39 PM

To: WASO_CR_NRHE@nps.gov

cc: (bcc: Tracey Sculle/HPA/ILL)

Subject: National Register Weekly List 12/17/2004

December 17, 2004

The Director of the National Park Service is pleased to send you the following announcements and actions on properties for the National Register of Historic Places. For further information contact Edson Beall via voice (202) 354-2255, E-mail: Edson_Beall@nps.gov

New National Register Teaching with Historic Places Lesson Plan Focuses on December 7, 1941, A Day That Will Live in Infamy

The new National Register of Historic Places Teaching with Historic Places lesson plan, Remembering Pearl Harbor: The USS Arizona Memorial, showcases the events that lead the United States of America directly into World War II on the fateful day of December 7, 1941, when the US Naval base at Pearl Harbor was attacked. Using maps, photos, charts, readings and activities, the lesson plan brings to students and teachers alike the events which changed the lives of our nation and propelled us into battle against the Axis powers. Found online at the National Register of Historic Places homepage at <http://www.cr.nps.gov/nr/>, the lesson also commemorates the sacrifices of American lives made at Pearl Harbor, where today the USS Arizona rests as a National Memorial below the water.

Our physical location address is:

National Park Service 2280
National Register of Historic Places
1201 "I" (Eye) Street, NW,
Washington D.C. 20005

Please have any Fed Ex, UPS packages sent to the above address. Please continue to use alternate carriers, as all mail delivered to us via United States Postal Service is irradiated and subsequently damaged.

WEEKLY LIST OF ACTIONS TAKEN ON PROPERTIES: 12/06/04 THROUGH 12/10/04

KEY: State, County, Property Name, Address/Boundary, City, Vicinity, Reference Number, NHL, Action, Date, Multiple Name

GEORGIA, BRYAN COUNTY,
Pembroke Historic District,
Centered on US 280 and Main St.,
Pembroke, 04001318,
LISTED, 12/08/04

GEORGIA, WILKES COUNTY,
Washington Historic District,
Centered on West Robert Toombs Ave. and N. Alexander St.,
Washington, 04001319,
LISTED, 12/06/04

ILLINOIS, COOK COUNTY,
Chicago and North Western Railway Power House,
211 N. Clinton St.,
Chicago, 04001306,
LISTED, 12/10/04

ILLINOIS, DU PAGE COUNTY,
Bassett, Orland P., House,

329 E. Sixth St.,
Hinsdale, 04001299,
LISTED, 12/07/04

ILLINOIS, OGLE COUNTY,
Polo Independent Order of Odd Fellows Lodge No. 197,
117 W. Mason St.,
Polo, 04001302,
LISTED, 12/06/04

ILLINOIS, TAZEWELL COUNTY,
St. Louis, Peoria and Northern Railroad Depot,
1408 Broadway St.,
Pezin, 04001305,
LISTED, 12/06/04

INDIANA, ALLEN COUNTY,
Eyrn, Irene, Tuberculosis Sanatorium--Physicians' Residences,
12371 and 12407 Lima Rd.,
Fort Wayne, 04001316,
LISTED, 12/06/04

INDIANA, ALLEN COUNTY,
Rankin, Alexander Taylor, House,
215 S. Lafayette St.,
Fort Wayne, 04001317,
LISTED, 12/06/04

INDIANA, BENTON COUNTY,
Fowler Theatre,
111 E. 5th St.,
Fowler, 04001315,
LISTED, 12/06/04

INDIANA, CASS COUNTY,
Keip, John, House,
2500 E. Broadway Ave.,
Logansport, 04001307,
LISTED, 12/06/04

INDIANA, DELAWARE COUNTY,
Ridgwood Evangelical Lutheran Church,
9200 West County Road 700 South,
Middleton, 04001314,
LISTED, 12/06/04

INDIANA, HUNTINGTON COUNTY,
Victory Noll--St. Felix Friary Historic District,
1900 W. Park Dr.--1280 Hitzfield St.,
Huntington, 04001311,
LISTED, 12/06/04

INDIANA, JAY COUNTY,
Votaw, Jonas, House,
1225 E. Meridian St.,
Portland, 04001308,
LISTED, 12/06/04

INDIANA, MARION COUNTY,
Bingham, Joseph J., Indianapolis Public Schoo. #84,
440 E. 57th St.--5702 Central Ave.,
Indianapolis, 04001310,
LISTED, 12/06/04
(Public School Buildings in Indianapolis Built Before 1940 MPS)